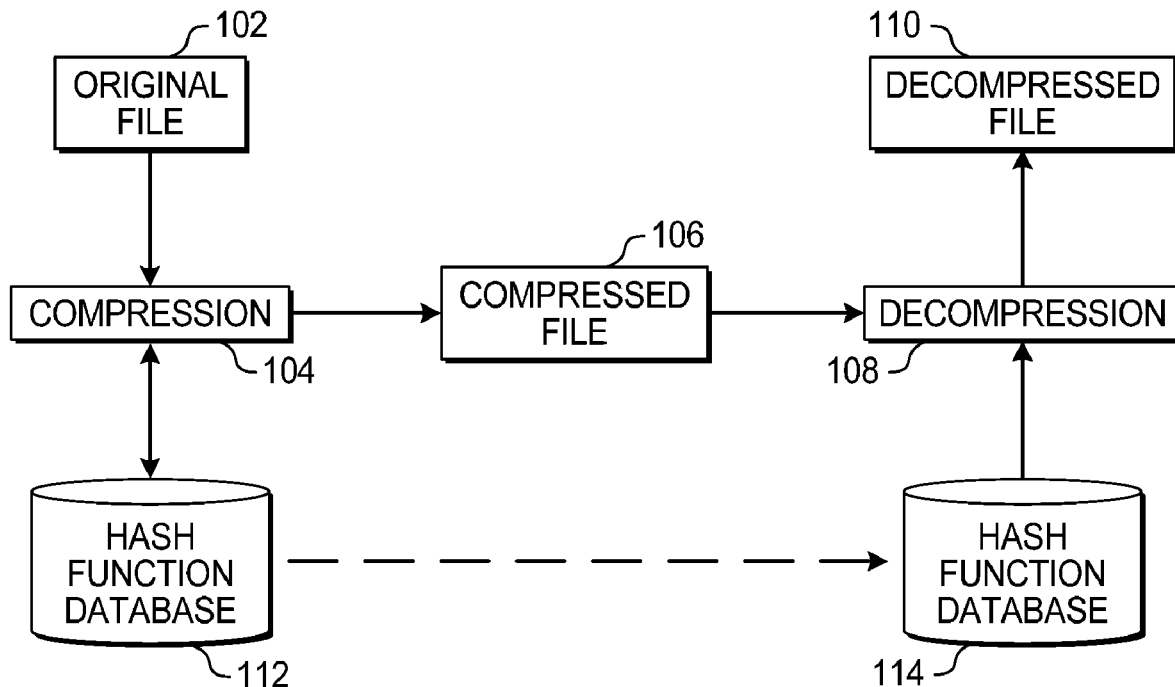




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**Hollis**(10) **Pub. No.: US 2009/0319547 A1**(43) **Pub. Date: Dec. 24, 2009**(54) **COMPRESSION USING HASHES****Publication Classification**(75) Inventor: **William K. Hollis**, Duvall, WA  
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**G06F 17/30** (2006.01)(52) **U.S. Cl.** ..... **707/101; 707/E17.002**(57) **ABSTRACT**Correspondence Address:  
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A compression algorithm may use a hash function to compress a file. The hash function may be selected to have multiple collisions so that a compressed file may include the hash values and indexes to the collisions. In some cases, a database of data and their hash values may be built during compression, while in other cases a preexisting database may be used. A preexisting database may be used as a shared secret to provide security to the compressed file. In many embodiments, the compression algorithm may be used recursively to reduce the size of the file by using the same or different hash functions.

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**SYSTEM FOR FILE  
COMPRESSION AND  
DECOMPRESSION**